Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-27. (canceled)

28. (withdrawn) A composition comprising a source of alkaline phosphatase (AP) that is suitable for preventing or reducing lipopolysaccharide (LPS)-induced toxicity at a mucosal surface when the AP is delivered to the mucosa of a body cavity, which composition optionally further comprises a pharmaceutically acceptable: (i) stabilizer, (ii) activator, (iii) carrier, (iv) permeator, (v) propellant, (vi) disinfectant, (vii) protectant, (viii) diluent, (ix) nutrient or (x) another excipient, that promotes AP delivery to said mucosa.

29. (withdrawn) The composition of claim 28 wherein the AP is a mammalian intestinal AP, a tissue non specific AP, a placental AP or a liver AP.

30. (withdrawn) The composition according to claim 28 wherein the AP is of human or bovine origin.

31. (withdrawn) The composition according to claim 28 wherein the source of AP is a purified AP, an AP-enriched food product or an AP-enriched nutraceutical suitable for oral ingestion and delivery of the AP to the mucosal lining of the gastrointestinal (GI) tract.

32. (withdrawn) The composition according to claim 31 wherein the food product is a plant, a vegetable or a fruit that is optionally genetically modified to comprise and enhanced level of AP.

33. (withdrawn) The composition according to claim 31 wherein the food product is a dairy product.

34. (withdrawn) The composition according to claim 33 wherein the dairy product is non-pasteurized or partially pasteurized milk or a milk fraction.

35. (withdrawn) The composition according claim 34 wherein the milk fraction is the milk fat globule membrane fraction.

36. (withdrawn) The composition according to claim 28 wherein the source of AP is enterically coated for oral administration and delivery to the GI mucosa.

37. (withdrawn) An inhalation or spray device loaded with a composition according to claim 28 and a propellant and/or a nebulizer.

38. (currently amended) A method for preventing or reducing LPS toxicity at a mucosal surface of a mammalian body cavity in a subject, comprising administering to the subject in need thereof a composition comprising a source of alkaline phosphatase (AP) that is suitable for preventing or reducing lipopolysaccharide (LPS)-induced toxicity at a

mucosal surface when the AP is delivered to the mucosa of the gastro-intestinal tract~~a body cavity, which composition optionally further comprises a pharmaceutically acceptable: (i) stabilizer, (ii) activator, (iii) carrier, (iv) permeator, (v) propellant, (vi) disinfectant, (vii) protectant, (viii) diluent, (ix) nutrient or (x) another excipient, that promotes AP delivery to said mucosa~~.

39. (currently amended) The method according to claim 38, wherein the subject suffers from~~prevention or reduction of LPS toxicity is for prophylaxis or treatment of~~ an LPS-mediated or LPS-exacerbated disease or condition.

40. (canceled)

41. (previously presented) The method according to claim 38 wherein the composition is administered orally.

42. (canceled)

43. (currently amended) The method according to claim 38[[42]] wherein the subject suffers from~~composition is administered for the prophylaxis or treatment of~~ a GI tract inflammatory disease.

44. (previously presented) The method according to claim 43, wherein the GI tract inflammatory disease is selected from the group consisting of: inflammatory bowel disease, Crohn's disease, colitis, ulcerative colitis, hepatobiliary disease, hepatitis B,

hepatitis C, liver cirrhosis, liver fibrosis, bile duct inflammation, biliary obstruction, pancreatitis, peritonitis, periodontal disease, and enterocolitis/necrotizing enterocolitis.

45. (currently amended) The method according to claim 38[[42]] wherein the GI tract is more sensitive to LPS as a result of enhanced mucosal permeability of LPS due to (i) decreased intestinal perfusion or (ii) intestinal ischemia.

46. (previously presented) The method according to claim 45 wherein the decreased perfusion or ischemia is a result of cardiopulmonary bypass surgery, trauma or wounding, burns, cardiac surgery, congenital heart disease, congestive heart failure, coronary heart disease, or ischemic heart disease.

47. (previously presented) The method according to claim 38 wherein the composition is administered topically to said mucosa.

48-54. (canceled)

55. (new) A method according to claim 38 wherein when the composition further comprises a pharmaceutically acceptable: (i) stabilizer, (ii) activator, (iii) carrier, (iv) permeator, (v) propellant, (vi) disinfectant, (vii) protectant, (viii) diluent, (ix) nutrient or (x) another excipient, that promotes AP delivery to said mucosa.